

# MARKING TORQUE SCREWDRIVER MODEL MNTD

## OPERATING INSTRUCTION

### MNTD MNTD Model

MNTD120CN with detachable Resin Grip



MNTD500CN with detachable Auxiliary Tightening Bar



To use this product properly and safely, please read this manual carefully before use. If you have any question about the product and its operations, please contact your nearest distributor or TOHNICHI MFG. CO., LTD.

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## 1 Application

- Marking torque screwdriver for tightening verification.

## 2 Features

- Marking on a screw head allows you to find non-tightened screws visually.
- Tightening and marking at a same time allow you to cut process and time.
- A marker moves along the side of a bit, allowing you to use in a narrow space.
- Hard to dry marker, adopting ball-point pen structure.
- Marker height is adjustable targeting various type of screws.

## 3 Warnings



- Ensure that the grip is free from oil and grease.  
Failure to this may cause your hand slip during tightening work, resulting in an accident or injury.
- Do not set this product beyond the maximum torque.  
Failure to this may result in an accident or injury.
- Check for cracks, scratches or rust.  
Failure to this may cause breakage, resulting in an accident or injury.  
Have the product inspected and repaired.
- Do not drop or give a strong impact to the product.  
Failure to this may cause damage on the product as well as decreasing accuracy and durability, and also may cause an accident or injury.
- Do not expose or use the product in the rain or at high temperature and humidity.  
Failure to this may cause rust, resulting in operational failure.
- Do not use the product in the places with high levels of dirt or dust.
- This product includes a magnet inside its structure.

# 4 Specifications

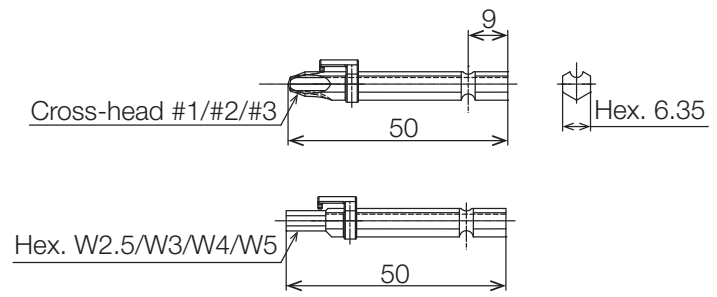
Model			MNTD120CN	MNTD260CN	MNTD500CN
Torque Range	[cN·m]	Min.-Max.	40-120	100-260	200-500
	[kgf·cm]	Min.-Max.	4-12	10-26	20-50
	[lbf·in]	Min.-Max.	4-10	10-22	20-40
Overall Length L			150	152	168
Grip D1			24	30.5	33
D2			30	36.5	39
D3			15	15	15
D4			33	41	
L1			91.5	94	110
L2			72	74.5	91
L4			34.5		
d					8
R					120

Note 1: Tohnichi original bit and marker are required to use.

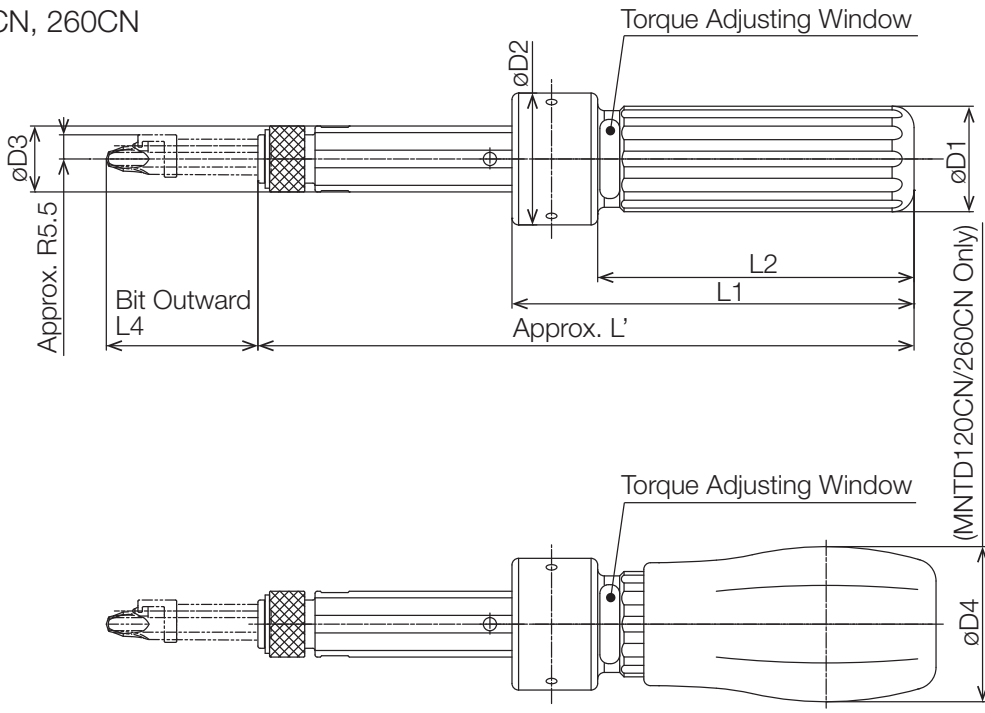
Standard Accessories : Auxiliary Tightening Bar for MNTD500CN only

Green color Resin Grip for MNTD120/260CN

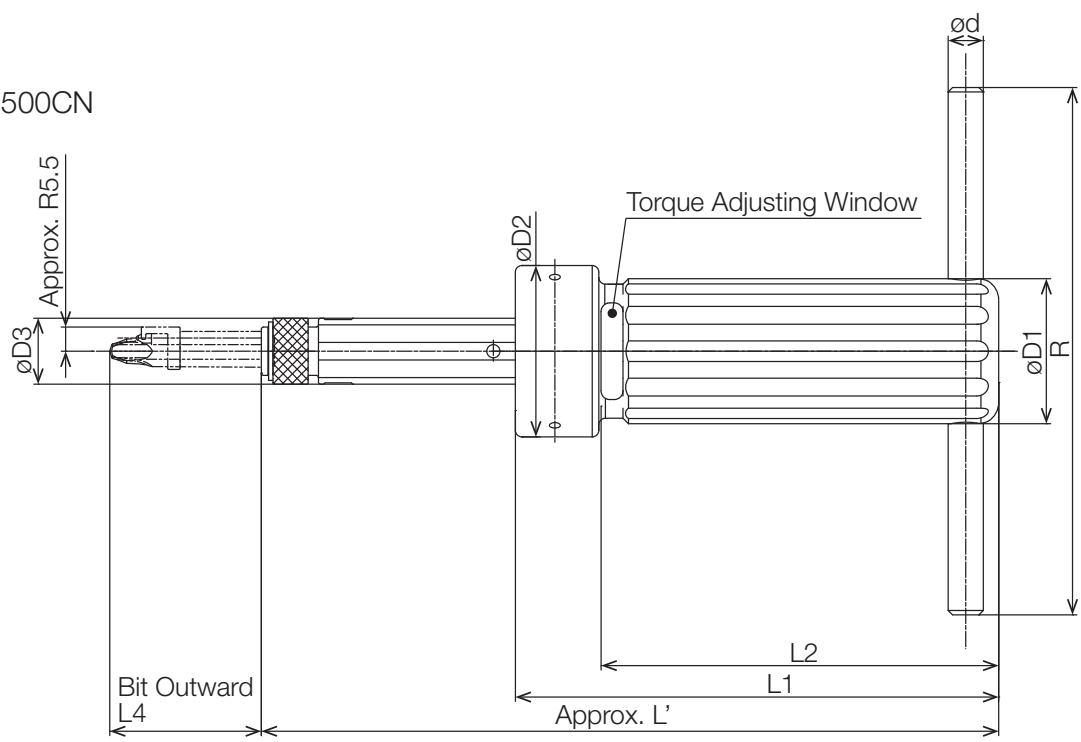
■ Tohnichi Original Bit



■ MNTD120CN, 260CN



■ MNTD500CN



# 5 Operating Procedure

## (1) Adjustment Pre-set Torque Value, Fig. 1

Set Tohnichi preset hook spanner into grooves of adjusting piece of MNTD grip. Adjust torque by rotating the adjusting piece in right and left. Preset torque value can be set on Tohnichi torque screwdriver tester, TDT3-G models.

**\* When setting torque at higher volume, bigger hand force is required for rotating. For the MNTD500CN, use an auxiliary accessory to set.**

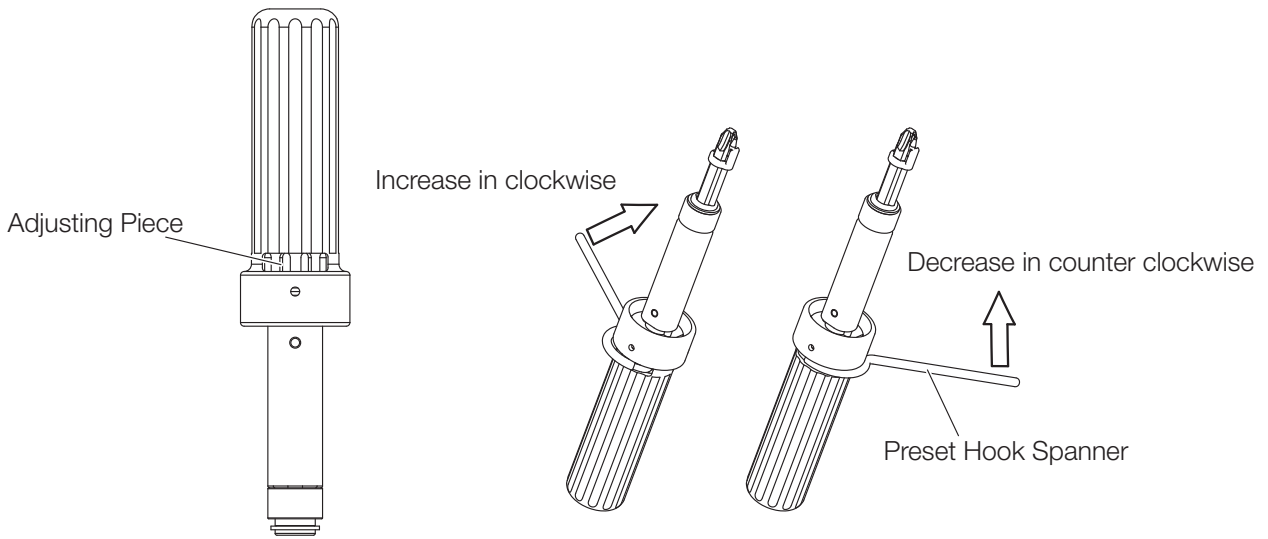


Fig. 1

## \* Precaution, Fig. 2

Make sure MNTD magnet sheet moves up and down smoothly when torque is applied and released.

When adjusting preset value on tester with the magnet sheet off shown as Fig. 2 NG, set-torque will be changed.

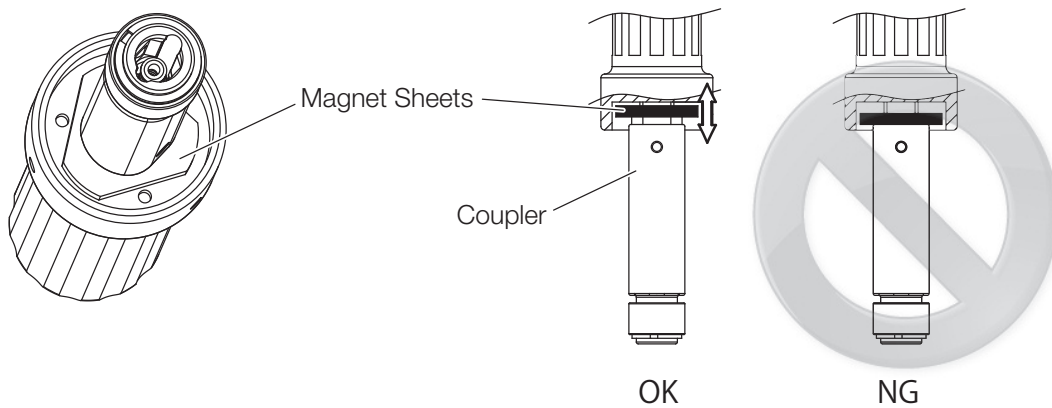
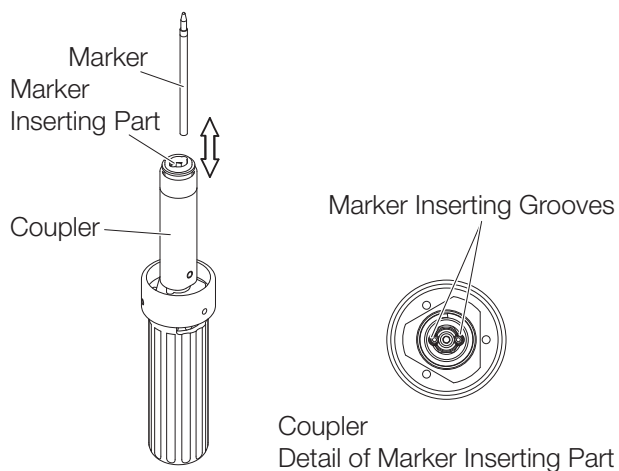


Fig. 2

**(2) Set MNTD marker, Fig. 3**

Insert Tohnichi marker and push it until marker grabs a pin inside the groove. When adjusting height position of marker or replace the marker, remove bit from MNTD coupler.



Coupler  
Detail of Marker Inserting Part

Fig. 3

**(3) Set MNTD bit, Fig. 4**

Pull down MNTD coupler case for inserting Tohnichi original bit. The marker goes through ditch of the bit, and Marker Guide of the bit holds head of the marker.

**\* Please hold the bit when pull down MNTD coupler case, otherwise the bit pops out.**

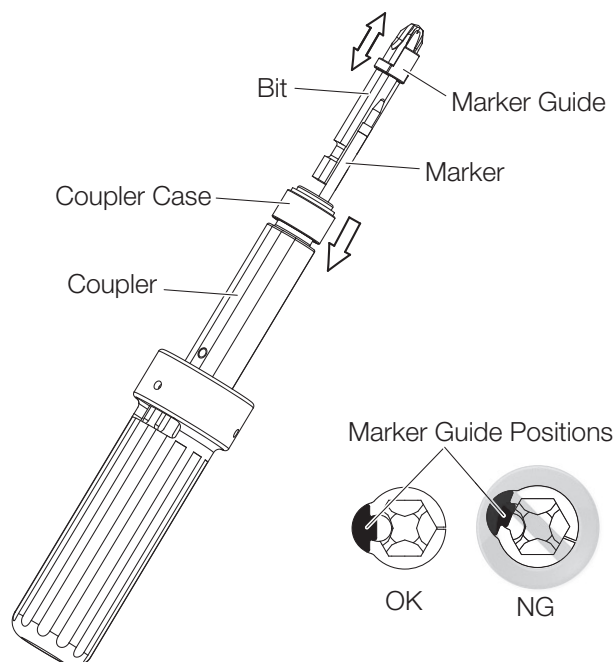


Fig. 4

- (4) Set MNTD on your fastening screw.
- (5) Operate MNTD as clockwise.
- (6) When MNTD clicks, your tightening work ends.

**\* There is an idle 15 degrees after MNTD clicks and the marker is operated. No additional torque is applied in the interval, please finish your operation before exceeding 15 degrees.**

■ **Adjust marker height position**

Set 1.5mm hexagonal wrench into MNTD Screw Head, Fig. 5. Turn the screw clockwise as the marker withdrawing, turn counter clockwise and the marker out.

Over loading on screw inside the coupler may cause damage.

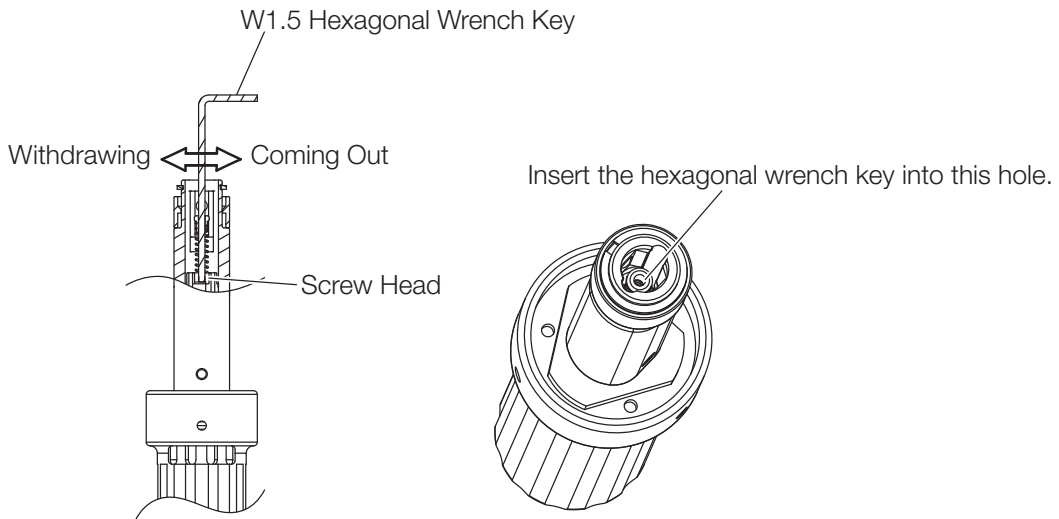


Fig. 5

Working distance of the marker is approximately 2mm. Adjust the distance as the marker touch and mark on the screw when MNTD clicks, Fig. 6.

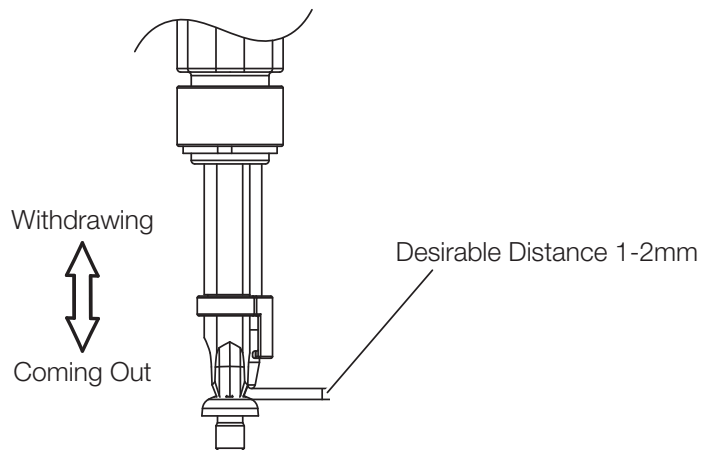


Fig. 6



# 6 Precautions for Handling

- (1) Additional turning after MNTD clicks, it results in over-torque.
- (2) Use proper bits suitable to screws, otherwise, it may damage screw head.
- (3) Store MNTD marker at room temperature, less than 50 degree celsius.
- (4) Do not keep MNTD marker upward, Fig. 7.

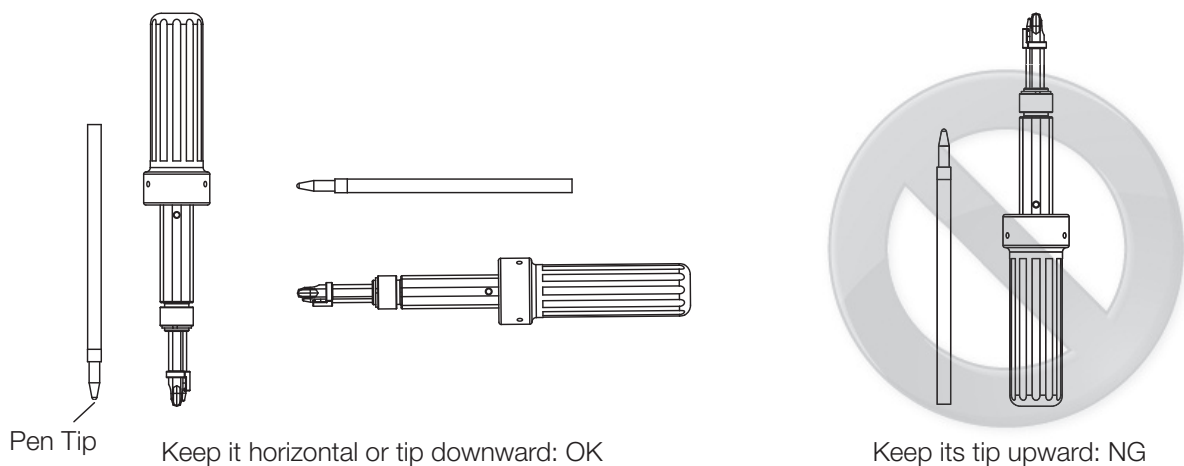


Fig. 7

- (5) Remove a pen tip protector before use, Fig. 8.

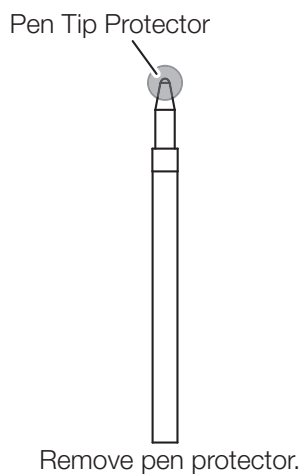


Fig. 8

- (6) When you start with a new marker or hardly delivering ink, try marking manually in several times, Fig. 9.

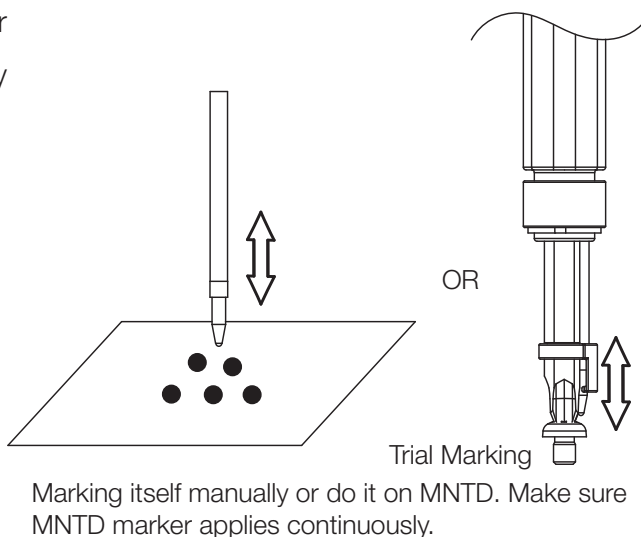


Fig. 9

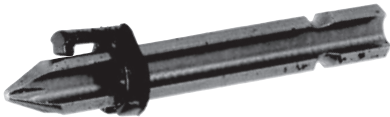
# 7 Inspection and Maintenance

- (1) MNTD is a measuring instrument. Check the condition periodically.
- (2) Any defects on MNTD, stop using it and contact distributors for repair and inspection.
- (3) In case of MNTD not being used for a while, keep it in low-humidity place.

# 8 Options

■ Tohnichi Original Phillips Bit

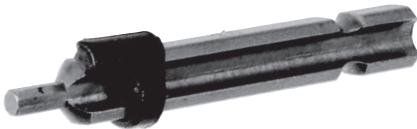
For flat head, pan head and binding head screws.



Catalog No.	Size	Applicable Screws
1601	MNTD#1Bit	M2.5, (M3)
1602	MNTD#2Bit	M3, M4, M5
1603	MNTD#3Bit	M6

■ Tohnichi Original Hex. Bit

For hexagonal socket head screws.



Catalog No.	Size	Applicable Screws
1611	MNTD W2.5 Bit	M3
1612	MNTD W3 Bit	M4
1613	MNTD W4 Bit	M5
1614	MNTD W5 Bit	M6

- Standard bits on the marker are not available to use.
- Make sure selected bit fits on screws.
- Parts#1601 for M3 is only available for Binding Head Screw.

■ Marker



Catalog No.	Description
1621	Marker Refill Red Pack of 10
1622	Marker Refill Red Pack of 100
1623	Marker Refill Blue Pack of 10
1624	Marker Refill Blue Pack of 100

- Disposable Marker sold in pack.

■ Preset Hook Spanner

For set torque of MNTD.



Catalog No.	Applicable Model
52	MNTD120CN
53	MNTD260CN
54	MNTD500CN

■ Auxiliary Tightening Tool

Assist high torque tightening work for MNTD500CN.



Catalog No.	Applicable Model
31	MNTD500CN

■ Resin Grip

For Management torque control by color grip.



Applicable Model	MNTD120CN	MNTD260CN
External Width, flat to flat	33mm	41mm
Diagonal Width	35mm	44mm
Length	67mm	68mm
Overall Length with Screwdriver attached	110mm	
Standard Accessory	Green	
Optional Colors	Orange, grey, black, green, red, blue	
Catalog No.	850/851/852/853/854/855	856/857/858/859/860/861

■ Torque Screwdriver Tester TDT3-G

Calibration and Torque Adjustment of MNTD.



● Features

- Loading device keeps stable measuring to avoid reading error.
- Judgement function shows results with 3 colors, white, red and blue.
- AC100 to 240V.

Model			TDT60CN3-G	TDT600CN3-G
Torque Range	Newton [cN·m]	Min.-Max.	2-60	20-600
		1 digit	0.005	0.05
	Metric [kgf·cm]	Min.-Max.	0.2-6	2-60
		1 digit	0.0005	0.005
	American [ozf·in]	Min.-Max.	3-80	30-800
		1 digit	0.005	0.05
	American [lbf·in]	Min.-Max.	0.2-5	2-50
		1 digit	0.0005	0.005

**Designs and specifications are subject to change without notice.**



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